

**Application of City of Great Falls
Water Reservation No. 71890-41K**

II. FINDINGS OF FACT

**A. FINDINGS ON THE QUALIFICATION OF THE CITY OF GREAT FALLS TO
RESERVE WATER (Mont. Code Ann. § 85-2-316(1)(1991); ARM
36.16.107B(1)(a).)**

1. The City of Great Falls is an incorporated municipality and a subdivision of the State of Montana. (Bd. Exh. 13-A, p. 1; Mont. Code Ann. § 85-2-316(1), ARM 36.16.107B(1)(a).)

2. The City of Great Falls has applied for an amended water reservation of 6,022 acre-feet/year (af/yr) of water with a maximum diversion rate of 11.5 cubic feet/second (cfs) to be diverted from the Missouri River for year round use. (Bd. Exh. 13-C, p. 2 and Great Falls Exh. 2, p. 4.) The City of Great Falls has also applied for 233.5 af/yr (4.45 cfs peak) from the Missouri River and for 233.5 af/yr (4.45 cfs peak) from the Sun River for parks irrigation. (Bd. Exh. 13-A, p. 6.) If the water adjudication process should reduce the city's existing Missouri River water claims, the City has conditionally applied for a reservation for water to be placed in storage; either water purchased from Canyon Ferry Reservoir or placed in a city developed 1,289 af reservoir at an unspecified location. (Bd. Exh. 12-A, p. 33.) The city need for storage is necessary if certain claimed rights of the City of Great Falls have not been beneficially used. (Bd. Exh. 12-A, p. 33.)

3. The City of Great Falls requested a water reservation to meet future demands by municipal and industrial users. (Bd. Exh. 13-A, p. 1.)

**B. FINDINGS ON THE PURPOSE OF THE WATER RESERVATION APPLIED FOR
BY THE CITY OF GREAT FALLS (Mont. Code Ann. § 85-2-
316(4)(a)(1991); ARM 36.16.107B(1)(b).)**

4. The City of Great Falls seeks to provide municipal water for future growth in a cost-effective manner. Sound planning requires providing users with an adequate water supply. The term of the water reservation is to year 2025. (Bd. Exh. 13-A, p. 4.)

5. The purpose of the reservation is to provide the water for municipal and industrial uses. (Bd. Exh. 13-A, p. 2.) Municipal and industrial uses are beneficial uses of water in Montana. (Mont. Code Ann. § 85-2-102(2)(a), ARM 36.16.102(3); ARM 36.16.107B(1)(b).)

C. FINDINGS ON THE NEED FOR THE WATER RESERVATION APPLIED FOR BY THE CITY OF GREAT FALLS (Mont. Code Ann. § 85-2-316(4)(a)(ii)(1991); ARM 36.16.107B(2)).

6. The Missouri River presently provides up to 71.5 cfs of direct flow water to the City of Great Falls. (Bd. Exh. 13-A, p. 4.) The reservation water requested would be delivered through the existing municipal water supply system. (Bd. Exh. 13-A, p. 2.) The reservation water requested for parks irrigation uses would be diverted directly from the Missouri and Sun Rivers. (Bd. Exh. 13-A, p. 6.) The source and delivery system for the possible water storage reservation is unknown, with possible storage locations including Canyon Ferry Reservoir or an off-stream storage site near the City of Great Falls. (Bd. Exh. 13-A, pp. 4 and 6.)

7. A reservation is the only means to obtain an early priority date for water that will be needed to meet projected municipal growth. In the future, water may be appropriated by competing agricultural, industrial, and instream users. (Bd. Exh. 40, p. 249; Bd. Exh. 13-A, pp. 10 and 11.)

8. It is important that the City of Great Falls have a water reservation to meet future municipal and industrial water demands in order for the community to prosper and develop. (Bd. Exh. 13-A, p. 12.)

9. Competing water uses may prevent the City of Great Falls from obtaining or perfecting a water use permit in the future. (Bd. Exh. 13-A, pp. 10-12.) Without a reservation, the City of Great Falls may have to go through a costly process of buying or condemning existing water rights to meet increasing demands. (Bd. Exh. 40, p. 249.)

D. FINDINGS ON THE AMOUNT OF WATER NEEDED FOR THE WATER RESERVATION APPLIED FOR BY THE CITY OF GREAT FALLS (Mont. Code Ann. § 85-2-316(4)(a)(iii)(1991); ARM 36.16.107B(3)).

10. The method of determining the amount of water requested for a water reservation by the City of Great Falls was based on a forecast of its future population to the year 2025 along with the estimated amount of water used per person. (Bd. Exh. 40, p. 236.) The methodology used by the City of Great Falls projected an amended average annualized (compounded population growth rate) of approximately .50 percent. (Great Falls Exh. 2, Jacobson Dir., p. 2) The 1990 population of Great Falls was 55,097 persons, a three percent decrease from the 1980 census. (Bd. Exh. 40, p. 236.) The City of Great Falls' revised population forecast for the year 2025 was 65,605 people. (Bd. Exh. 41, p. 101.) The City of Great Falls supplies an additional 12.5 percent of its water to customers outside the city limits. (Bd. Exh. 13-A, pp. 22 and 36.)

11. The populations recorded in the 1990 census indicate that the city population has been relatively stable from 1970 to the present. (Bd. Exh. 13-A, p. 15.)

12. The City of Great Falls has a low rate of leakage, estimated at 5 to 10 percent. (Bd. Exh. 13-A, p. 29.) Great Falls average use level of 191 gallons per person per day is lower than typical basin rates of 250 gallons per person daily. (Bd. Exh. 13-A, p. 29.)

13. The City of Great Falls is 100 percent metered at present. (Great Falls Exh. 2, Jacobson Dir., p. 3.)

14. The water use efficiencies associated with the municipal and industrial uses by the City of Great Falls are reasonable. (ARM 36.16.107B(3)(b).)

15. No other cost-effective measure could be taken within the reservation term to increase the use efficiency by the City of Great Falls and lessen the amount of water required for the purpose of the reservation. (ARM 36.16.107B(3)(b).)

E. FINDINGS THAT THE WATER RESERVATION APPLIED FOR BY THE CITY OF GREAT FALLS IS IN THE PUBLIC INTEREST (Mont. Code Ann. § 85-2-316(4)(a)(iv)(1991); ARM 36.16.107B(4).)

16. Benefits of the City of Great Falls' water reservation were calculated on a willingness-to-pay basis. Great Falls used a \$1.50/1,000 gallons value. (Bd. Exh. 13-A, p. 50.) Helena municipal users are currently paying \$2.47/1,000 gallons. (Bd. Exh. 40, p. 253.)

17. The additional water provided by the water reservation will cost approximately \$.13/1,000 gallons without additional costs to expand the distribution system. (Bd. Exh. 13-C, p. 6.)

18. The direct benefits of the City of Great Falls' water reservation exceed the direct costs. (ARM 36.16.107B(4)(a).)

19. Indirect benefits of the City of Great Falls' reservation may include secondary economic benefits to the community and to the state, and expanding both the property and income tax base from increased population. (Bd. Exh. 13-A, p. 51.)

20. Indirect costs of the reservation may include loss of opportunity for other development and increased administrative costs. While not quantified these costs are minor. (Bd. Exh. 13-A, p. 50.)

21. There is no significant adverse environmental impact associated with the use of the City of Great Falls' water

reservation. (Bd. Exh. 13-C, p. 6.) The effects of individual municipal water reservation depletions on water quality have not been quantified (Bd. Exh. 40, pp. 253 - 254), but should be very small. Resulting health risks have not been quantified. No other non-quantifiable benefits or costs were identified. (Bd. Exh. 13 - A.) No non-quantifiable benefits or costs were identified. (Bd. Exh. 13-C.)

22. Net benefits of granting the City of Great Falls' water reservation exceed the net benefits of not granting the water reservation and the project is economically feasible. (ARM 36.16.107B(4)(b); ARM 36.16.102(9).)

23. The City of Great Falls identified four alternative sources of water for future development. Chowen Springs, Giant Springs, alluvial aquifers and the Madison aquifer alternatives would not provide greater net benefits than the water reservation, (Bd. Exh. 13-A, pp. 40 to 46) and are not reasonable. (ARM 36.16.107B(4)(c).)

24. Failure to reserve water for future municipal and industrial use by the City of Great Falls is likely to result in an irretrievable loss of a resource development opportunity. (Bd. Exh. 13-A, p. 52; ARM 36.16.107B(4)(d).)

25. As conditioned, the City of Great Falls' water reservation will have no significant adverse impact to public health, welfare, or safety. (ARM 36.16.107B(4)(e).)

F. OTHER FINDINGS RELATING TO BOARD DECISION (Mont. Code Ann. § 85-2-316(3)(B), (4)(a)(iv)(b), (5), (6), and (9)(e)(1991); ARM 36.16.107B(5) through (8).)

26. The water reservation by the City of Great Falls will be used wholly within the state and within the Missouri River basin. (Bd. Exh. 13-A; ARM 36.16.107B(5) and (6).)

27. The City of Great Falls has identified a management plan for the design, development, and administration of its water reservation. (Bd. Exh. 13-A, p. 54.)

28. The City of Great Falls is capable of exercising reasonable diligence towards feasibly financing the project and applying reservation water to beneficial use in accordance with the management plan. (ARM 36.16.107B(7).)

29. The priority date of the City of Great Falls' water reservation is July 1, 1985. (Mont. Code Ann. § 85-2-331(4).)

30. As conditioned, the City of Great Falls' water reservation will not adversely affect any senior water rights. (ARM 36.16.107B(8).)

34. The public interest in protecting domestic and stockwater rights with a priority date on or after July 1, 1985 and perfected prior to the final date of this Order outweighs the values protected by the municipal reservations.

III. CONCLUSIONS OF LAW

1. City of Great Falls is a qualified applicant for a water reservation. (Mont. Code Ann. § 85-2-316(1)(1991).)

2. The purpose of the City of Great Falls' application is a beneficial use. (Mont. Code Ann. § 85-2-316(4)(a)(i)(1991); ARM 36.16.107B(1)(b).)

3. The need for the City of Great Falls has been established. Specifically, the City has established that there is a reasonable likelihood that future in-state competing water uses would consume the water available for the purpose of its reservation. (Mont. Code Ann. § 85-2-316(4)(a)(ii)(1991); ARM 36.16.107B(2).)

4. The methodologies and revised assumptions used by the City of Great Falls are suitable and accurate under present conditions. (ARM 36.16.107B(3)(a).) As modified, the City of Great Falls has established the amount of water needed to fulfill its reservation. (Mont. Code Ann. § 85-2-316(4)(a)(iii)(1991); ARM 36.16.107B(3).)

5. Based on a weighing and balancing of the evidence, the reservation requests by the City of Great Falls as modified herein are in the public interest. (Mont. Code Ann. § 85-2-316(4)(a)(iv); ARM 36.16.107B(4).)

6. Upper Missouri River water reservations approved by the Board shall have a priority date of July 1, 1985. (Mont. Code Ann. § 85-2-331(4).) The Board may determine the relative priorities of all reservations. (Mont. Code Ann. § 85-2-316(a)(e).)

7. The Board may grant, deny, modify, or condition any reservation applied for. In no case may the Board make a reservation for more than the amount applied for. (Mont. Code Ann. § 85-2-316.)

8. The Board has no authority under the reservation statutes or any other statutes to determine, or alter, any water right that is not a reservation. (Mont. Code Ann. § 85-2-316(14).)

IV. ORDER

1. Storage of up to 1,289 af of water would be concurrent and within the amounts of adjudicated water rights and approved reservations. Therefore, the reservation for water to be stored is needed only to the extent the City of Great Falls is not able to use its claimed water. Subject to all applicable modifications, conditions, and limitations (including but not limited to the conditions applied to consumptive use reservations in Exhibits A and B attached to this Order) the application of the City of Great Falls is granted for the following amount and flow of water: 11.5 cfs and 6,022 af/year for municipal and industrial uses and 8.9 cfs and 467 af/year (from April 1 to October 1 of each year) is for parks irrigation.

2. The point of diversion and place of use are from the well set forth in the reservation application City of Great Falls and by reference are made a part of this Order.

3. The reservation is adopted subject to being perfected by December 31, 2025.

4. Relative to other reservations the priority date of the reservation shall be ahead of any other non-municipal reservation granted with a priority date of July 1, 1985. The reservation shall have equal priority with all other reservations granted to all municipalities.

5. Any and all liability arising from the reservation or the use of the reservation is the sole responsibility of the applicant. By granting such reservations, the Board on behalf of itself and the Department of Natural Resources and Conservation assumes no liability.